

Engerix-B® & Recombivax HB®

Vaccine	Adult Dosage	Pediatric Dosage	Alternative Adolescent Dosage*	Schedule For Adults	Schedule For Children	Alternative Adolescent Schedule
Engerix-B (GlaxoSmithKline)	1 mL	0.5 mL	<i>(No alternative adolescent dosage)</i>	Dose #1: any age Dose #2: 1 month later Dose #3: 5 months later	Dose #1: birth Dose #2: 1-2 months Dose #3: 6-18 months (after 24 weeks of age)	<i>(No alternative adolescent schedule)</i>
Recombivax HB (Merck)	1 mL	0.5 mL	1.0 mL (two 0.5 mL doses combined)	Dose #1: any age Dose #2: 1 month later Dose #3: 5 months later	Dose #1: birth Dose #2: 1-2 months Dose #3: 6-18 months	Dose #1: 11-15 years Dose #2: 4-6 months later (before age 16)

Hepatitis B Vaccine Recommendations

Universal Vaccination of Infants:

- All infants should receive the hepatitis B vaccine series as part of the recommended childhood immunization schedule.
- Medically stable newborns weighing ≥ 2000 g at birth and born to HBsAg negative mothers should receive the 1st dose of hepatitis B single-antigen vaccine before hospital discharge.

Vaccination of Children and Adolescents Who Were Not Previously Vaccinated:

- Children and adolescents who have not previously received hepatitis B vaccine should be vaccinated routinely at any age with an appropriate dose.
- All children 11-12 years should complete the vaccine series if they were not previously vaccinated or were incompletely vaccinated.
- All children and adolescents <19 years (including internationally adopted children) who were born in Asia, the Pacific Islands, African, or other intermediate- or high-endemic countries or who have at least one parent who was born in one of these areas would complete the vaccine series if they were not previously vaccinated or were incompletely vaccinated.
- Adolescents can receive an alternative 2-dose series*:
 - ✓ only approved for adolescents 11 through 15 years of age
 - ✓ only applies to Merck hepatitis B vaccine Recombivax HB
 - ✓ dosage is two 0.5 mL vials (1.0 mL) of Recombivax HB separated by 4-6 months
 - ✓ no other single-antigen hepatitis B vaccine can be used for this alternative schedule
 - ✓ this 2-dose schedule should be completed before the 16th birthday otherwise 3 doses are needed to complete the hepatitis B series



Contraindications

Hepatitis B vaccine should not be given to:

- persons with a history of hypersensitivity to yeast or to any vaccine component
- persons with serious adverse events (e.g. anaphylaxis) after receipt of hepatitis B vaccine



Vaccination of Babies Born to Women Who Are HBsAg Positive:

- All infants born to HBsAg-positive women should receive single-antigen hepatitis B vaccine and HBIG (0.5mL) ≤ 12 hours of birth.
- For pre-term infants weighing <2000 g, the initial vaccine dose (birth dose) should not be counted as part of the vaccine series because of the potentially reduced immunogenicity of hepatitis B vaccine in these infants. Three additional doses of vaccine (for a total of 4 doses) should be administered beginning when the infant reaches age 1 month.
- Combination vaccines may be used for infants ≥ 6 weeks born to HBsAg-positive mothers to complete the vaccine series after receipt of a single-antigen birth dose of Hepatitis B vaccine and HBIG.

Vaccination of Infants Born to Women with Unknown HBsAg Status:

- Women admitted for delivery without documentation of HBsAg test results should have blood drawn and tested as soon as possible after admission.
- While test results are pending, all infants born to women without documentation of HBsAg results should receive the first dose of single-antigen hepatitis B vaccine (without HBIG) ≤ 12 hours after birth.
- If HBsAg results so return positive, the infant should receive HBIG as soon as possible (no later than 7 days) and the vaccine series should be completed according to the recommended schedule.

Vaccination of Pregnant Adolescents and Women*:

- All pregnant women should be routinely tested for HBsAg during an early prenatal visit (e.g. 1st trimester) in each pregnancy, even if previously vaccinated or tested.
- Pregnant women who are identified as being at risk for HBV infection during pregnancy (e.g. having more than one sex partner during the previous 6 months, been evaluated or treated for an STD, recent or current injection-drug use, or having had an HBsAg-positive sex partner) should be vaccinated.

***Pregnancy is not a contraindication to vaccination. Limited data indicate no apparent risk for adverse events o developing fetuses when hepatitis B vaccine is administered to pregnant women. Current vaccines contain noninfectious HBsAg and should cause no risk to the fetus.**

Precautions

Hepatitis B vaccine should be used cautiously:

- in individuals who have allergies to latex
- in individuals who have moderate or severe acute illness until illness is resolved
- infants who weigh <2000 g due to observance of apnea in some premature infants

Adverse Reactions

- **Local:** pain at injection site
- **Systemic:** fever, weakness, headache, nausea, diarrhea

Vaccine Storage and Handling

- Store hepatitis B vaccines in the refrigerator between 35°F and 46°F (aim for 40°F).
- **Do not freeze** – discard if vaccine has been frozen.

